

1 BEFORE THE
2 POLLUTION CONTROL HEARINGS BOARD
 STATE OF WASHINGTON

3 IN THE MATTER OF
4 PACIFIC POWER AND LIGHT COMPANY,)

 Appellant,)

5 v.)

6 SOUTHWEST AIR POLLUTION)
7 CONTROL AUTHORITY,)

 Respondent.)
8 _____)

PCHB No. 79-21

FINAL FINDINGS OF
FACT, CONCLUSIONS OF
LAW AND ORDER

9 This matter, the appeal of two \$250 civil penalties for the
10 alleged violation of WAC 173-400-040, came before the Pollution
11 Control Hearings Board in Longview, Washington on June 28, 1979.
12 Hearing examiner William A. Harrison presided alone. The respondent
13 elected a formal hearing pursuant to RCW 43.21B.230.

14 Appellant was represented by its attorney, Richard D. Bach;
15 respondent was represented by its attorney, James D. Ladley.
16 Reporter Betty Koharski recorded the proceedings. Witnesses were
17 sworn and testified. Exhibits were examined.
18

1 Having read the transcript, having examined the exhibits, and
2 having reviewed the proposed Findings of Fact, Conclusions of Law
3 and Order of the hearing examiner, and having considered exceptions
4 from appellant, said exceptions being granted in part and denied in
5 part, the Pollution Control Hearings Board makes the following

6 FINDINGS OF FACT

7 I

8 Appellant, Pacific Power and Light Company, is the operator of a
9 coal-fired electrical generating plant located in Centralia. The
10 plant includes two units, each with a stack some 500 feet high. The
11 plant also includes four cooling towers which are less than half the
12 height of the stacks.

13 II

14 On February 2, 1979, respondent's inspector observed emissions
15 emanating from each of the two stacks at appellant's plant. The
16 inspector read the opacity of the emissions from his observation
17 point some 3/4 mile away and under conditions of complete cloud
18 cover which totally obscured the sun. Appellant contends that the
19 distance from which these observations were made compromises their
20 accuracy. Appellant further contends that the observations were
21 unreliable because the inspector did not place the sun at his back
22 while observing the emissions. We disagree. As to distance, the
23 inspector read opacity at points some 150 feet above the points of
24 discharge (which were the tops of the 500 foot stacks) or 650 feet
25 above ground. The emissions were of no less diameter than that of
26 the stacks which is 24 feet in each case. The distance from which

1 the inspector made his observation allowed a more perpendicular, and
2 hence objective, view and was not excessive in the circumstances of
3 this case. As to sun position, that factor is moot where, as here,
4 the sun is totally obscured by cloud cover. We find that the
5 accuracy of respondent's opacity readings was not compromised by
6 either the inspector's distance from the source or the sun.

7 Appellant caused emissions aggregating, in the case of the north
8 stack, at least ten minutes in one hour of an opacity ranging from
9 25% - 45%; and, in the case of the south stack, at least 9-1/4
10 minutes in one hour of an opacity ranging from 25% - 40%.

11 Respondent's inspector notified appellant's Plant Manager of
12 these emissions on the day in question. Appellant later received a
13 Notice of Violation assessing two \$250 civil penalties for two
14 violations of WAC 173-400-040, a statewide emission standard. From
15 these, appellant appeals.

16 III

17 WAC 173-400-040 provides, in pertinent part:

- 18
- 19 (1) Visible emissions. No person shall
20 cause or permit the emission for more
21 than three minutes, in any one hour, of
22 an air contaminant from any source which
23 at the emission point, or within a reasonable
24 distance of the emission point, exceeds
25 20% opacity except as follows:
- 26 (a)
 - 27 (b) When the owner or operator of a
source supplies valid data to show that the
opacity is in excess of 20% as the result of the
presence of condensed water droplets, and that
the concentration of particulate matter, as
shown by a source test approved by the
director, is less than one-tenth (0.10) grains

1 per standard dry cubic foot. For combustion
2 emissions the exhaust gas volume shall be
corrected to 7% oxygen.

3

4 "Emission" means a release of contaminants into the ambient air,
5 WAC 173-400-030(11). "Air contaminant" means dust, fumes, mist,
6 smoke, other particulate matter, vapor, gas, odorous substance or
7 any combination thereof. WAC 173-400-030(1).

8 IV

9 Appellant raises the defense of condensed water droplets set out
10 in WAC 173-400-040(b), above.

11 The plume from each of appellant's stacks gradually increased in
12 opacity for a short distance above the point of discharge. At the
13 far end of the plume, the opacity likewise decreased gradually.
14 Gradual changes in opacity at these points are at odds with the
15 distinct commencement and termination of opacity which typifies a
16 plume of condensed water droplets. The appellant's emissions were
17 yellow-brown in color which contrast with the normal white color of
18 a water droplet emission. Finally, the plumes from appellant's
19 stacks combined, beyond the point where opacity was read, and
20 drifted intact some 3 to 5 miles until disappearing over the hill
21 tops. Contrarily, the plume from a nearby cooling tower, agreed to
22 consist of condensed water droplets, dissipated within 300 to 400
23 yards.

24 Appellant's monitors recorded permissible opacities inside the
25 stacks on the date and time in question. We have found, however,
26 that the emissions from the stacks exhibited excessive opacity.

1 This condition could result from water vapor passing the in-stack
2 opacity monitors undetected then condensing into water droplets in
3 the ambient air and there exhibiting opacity. Appellant has not
4 shown that the opacity exceeded 20% as the result of water vapor,
5 and that air contaminants from its coal burning sources are less
6 than one-tenth grain per standard cubic foot. Therefore, neither
7 the in-stack opacity records nor other evidence¹ which appellant
8 has presented will support a finding of the relative content of
9 water droplets versus air contaminants in the emissions which are
10 the object of the regulation, WAC 173-400-040.

11 V

12 Any Conclusion of Law which should be deemed a Finding of Fact
13 is hereby adopted as such.

14 From these Findings the Board comes to these

15 CONCLUSIONS OF LAW

16 I

17 In a case such as this one involving assessment of a civil
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19 1. Appellant's data attempting to relate in-stack opacity
20 readings with weight rate loading in 1974 and 1975 appears
21 speculative at best. Data results show, for example, in-stack
22 opacity of 2% as correlating to a weight rate of between .0007 and
23 .0272 total grains per standard cubic foot. This is a wide
24 variation. From the in-stack monitoring records at the time of the
25 inspector's observation on February 2, 1979, the in-stack opacity
reached up to 12% at times. Based on this evidence we cannot reach
a conclusion that the boilers were operating below 0.1 grain per
standard cubic foot. Appellant has not shown that its other test,
of April 30, 1979, was conducted under conditions similar to those
occurring on February 2, 1979, particularly as to boiler operating
conditions and in-stack opacity.

1 penalty, the respondent bears the burden of ultimate persuasion and
2 the burden of first proceeding with the evidence to establish a
3 prima facie case. Here, respondent established a prima facie case
4 by proving that appellant caused emissions of excessive opacity.
5 Respondent buttressed its case with proof that the emissions in
6 question differed in appearance from water vapor emissions.

7 At this point the burden of going forward with the evidence
8 shifted to appellant which must affirmatively show that the opacity
9 is in excess of 20% as a result of the presence of condensed water
10 droplets and that particulate matter in the emission is less than
11 one-tenth grain per standard cubic foot. While appellant attempted
12 to prove this by its in-stack opacity records, we have found these
13 and other evidence insufficient to rebut respondent's case in this
14 instance. We conclude that appellant emitted an air contaminant
15 from each of its stacks constituting two violations of WAC
16 173-400-040.

17 II

18 The amount of each civil penalty is reasonable on the facts of
19 this case.

20 III

21 Any Finding of Fact which should be deemed a Conclusion of Law
22 is hereby adopted as such.

23 From these Conclusions the Board enters this
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27 FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW AND ORDER 6

ORDER

The two \$250 civil penalties are each hereby affirmed.

DATED this 20th day of December, 1979.

POLLUTION CONTROL HEARINGS BOARD

Nat W Washington
NAT W. WASHINGTON, Chairman

Chris Smith
CHRIS SMITH, Member

David Akana
DAVID AKANA, Member